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The Earthen Dam

Watauga Dam, an impressive feat of engineering, is an earth-and-rock dam located in Carter County, Tennessee. Constructed by the Tennessee Valley Authority (TVA) in the 1940s, it stands as a testament to mid-20th-century engineering and design. The dam's primary purpose is for hydroelectric power generation and flood control, playing a crucial role in managing the Watauga River's flow. At a towering height of 318 feet and stretching 900 feet across, Watauga Dam was one of the highest earth-and-rock dams in the United States at the time of its completion. Its construction began on February 16, 1942, but was

halted due to World War II priorities, resuming in 1946 and reaching completion in 1948. The dam created the Watauga Reservoir, which spans 6,430 acres and is managed for multiple uses, including power generation, water quality, and aquatic ecology. The reservoir has a total capacity of 677,000 acre-feet, with a portion reserved for flood control. This structure is not only functional but also contributes to the region's beauty, surrounded by the Cherokee National Forest and the Appalachian Mountains. It offers access to the Appalachian Trail and a wildlife observation area below the dam, where visitors can view various species of waterfowl. The Watauga River, named after a Cherokee settlement, flows through a gap in

Iron Mountain, providing a picturesque setting for the dam and reservoir. The dam's spillway can discharge a maximum of 73,200 cubic feet per second, showcasing its capability to handle significant water flow. Watauga Lake, formed by the dam, boasts 106 miles of shoreline and operates within a typical annual water level variance of about 9 feet, accommodating seasonal flood storage. The dam's construction in a valley with high rock walls and a solid base was ideal for its longevity and stability. Recognized for its historical significance, Watauga Dam was listed on the National Register of Historic Places on August 11, 2017. It serves as a reminder of the region's history and the TVA's role in transforming the

landscape and economy of the Tennessee River watershed. The dam's earthen structure, combined with its rock foundation, represents a blend of natural materials and human ingenuity, ensuring its resilience and functionality for generations to come.